Center for Integrated Healthcare

VA HEALTH CARE | Defining EXCELLENCE in the 21st Century

Information from your Patient Aligned Care Team

Alcohol Effects & Safer Drinking Habits

Alcohol and the Body

Alcohol In:

After alcohol enters the stomach, it is absorbed quickly into the bloodstream through the stomach wall. The rest enters the blood stream through the small intestine. How fast alcohol is absorbed you're your bloodstream depends on several things. Higher concentrations of alcohol like shots are absorbed faster than lower concentrations like light beer. Absorption is faster for a person who weighs less. If you've eaten recently, the absorption of alcohol will be slower than if you drink on an empty stomach.

Alcohol Out:

Alcohol leaves your body in several ways. First, 90% is removed from the blood by the *liver*. Alcohol is then broken down into several chemicals, including carbon dioxide and water. The carbon dioxide and water come out in your urine. The final 10% is not removed by the liver and is expelled through sweat and breath. The reason why it is difficult to sober someone up is because the liver can only process about one drink per hour *(this is slow considering the body absorbs alcohol through the stomach lining in about 10 minutes)*. There's not much that can influence how fast your liver processes alcohol. That's why cold showers, hot coffee or vomiting don't help.

Tolerance:

Over time, a person who drinks regularly has to drink more and more to feel the same effect as they did when they first began drinking. People develop tolerance because they have adapted, both physically and psychologically, to having alcohol in their system. Low tolerance is like a built-in warning system when alcohol levels get too high in our body. Tolerance may *seem* like a good thing because it allows heavy drinkers to function when they have high levels of alcohol in their bodies, but it is <u>not a good thing</u>. People with high alcohol tolerance short circuit this internal warning system. They don't experience negative reactions to the alcohol and continue drinking. Tolerant individuals are able to keep high levels of toxins in their bodies for long periods of time, which increases stress on sensitive internal organs and increases the chances of developing long-term health problems.

The good news about tolerance is you can decrease it (and the associated health risks) fairly easily. Tolerance can be reversed gradually through either moderating the quantity and frequency of your drinking, or taking a break from the alcohol for a few weeks.

A standard drink of alcohol:

- 1 12 oz beer
- 1 wine cooler
- 1 5 oz glass of wine
- 1 shot of liquor
- 1 cocktail

Alcohol Intoxication and Performance

Sleep:

Bottom line is alcohol is bad for your sleep. Poor sleep can limit your ability to think, act quickly and perform well. Alcohol intoxication shortens the time necessary to fall asleep, but sleep is usually disturbed and fragmented after just a few hours. Restful, restorative sleep decreases during the second half of the night. So, heavy drinking compromises your sleep throughout the night. Poor sleep decreases the body's ability to function optimally. Poor sleep also decreases your physical endurance. **If you want peak performance (at work, sports, or other engagements), either plan to abstain from alcohol use altogether or drink in moderation.**

Up and Down Response to Alcohol in Your Body:

The up and down response refers to two different effects that alcohol produces. The up response is feeling stimulated or excited. This is followed by the down response of feeling depressed and tired. The initial up response is associated with low but rising blood alcohol levels (BALL. The BAL is the ratio of alcohol to blood in your bloodstream. The down response is associated more with falling BALs. The up and down response is important because it allows you to test whether "more" alcohol means "better" is really true. It also helps you understand how tolerance affects you physiologically when it comes to drinking alcohol.

Over time, as blood alcohol levels begin to fall, people experience the down effects of alcohol. This is the time when people begin to drink more in an attempt to get back their initial stimulated or excited state. However, the more alcohol that is consumed, the greater both the arousal and the depressant effects will be. At some point, the stimulating effects of a rising BAL will not amount to euphoria. The point at which an increase in BAL will not result in elevated mood or energy is known as **the point of diminishing returns**. For most people, that point is a BAL of .05%.

BAL	Effects of Alcohol on the Body
.02%	Light to moderate drinkers begin to feel some effect
.04%	Most people begin to feel relaxed
.06%	Judgment is somewhat impaired; people are less able to make rational decisions about their capabilities (e.g., driving)
.08%	Definite impairment of muscle coordination and driving skills. Increased risk of nausea and slurred speech. Legal intoxication.
.10%	Clear deterioration of reaction time and control.
.15%	Balance and movement are impaired. Risk of blackouts and accidents.
.30%	Many people lose consciousness. Risk of death.
.45%	Breathing stops, death occurs.

Moderating Your Drinking

Decide what you want from drinking alcohol: Think about the pros and cons (short and long-term) for moderating your use versus maintaining your usual drinking behavior. Also consider what you absolutely want to avoid when you drink.

Set drinking limits:

- What's your upper limit on the number of drinks you consume per week?
- At what point do you decide you've had enough (consider a BAL limit)?
- What's the maximum number of days for drinking you will choose to give yourself?
- Use standard guidelines to determine what constitutes one drink:
  (1.25 oz of 80-proof liquor; 4 oz of wine; 10 oz of beer with 5% alcohol (microbrews and "ice" beer); 12 oz of beer with 4% alcohol (standard beer)

Count your drinks and monitor your drinking behavior:

Try it! Most people are surprised by what they learn when they actually count how much they drink. Simply observe your behavior – this is like standing outside yourself and watching how you are acting when you are drinking. Some people put the bottle caps in their pockets while drinking to monitor how many beers they have had. You can also make tick marks with a pen on a napkin to monitor the number of drinks.

Alter how and what you drink:

- Switch to drinks that contain less alcohol (e.g., light beers)
- Slow down your pace of drinking
- Space drinks further apart
- Alternate drinking nonalcoholic beverages with alcoholic drinks

Manage your drinking in the moment:

- Stay awake and on top of how you drink and what you're drinking when you're at a party
- Choose what's right for you and ask a close friend to help you monitor (preferably the friend that doesn't think being drunk is cool and cooler with company)

**Safe drinking guideline:

- For women, no more than 3 drinks/day; no more than 9 drinks/week.
- For men, no more than 4 drinks/day; no more than 14 drinks/week